2485 Natomas Park Drive

Suite 600

Sacramento, Ca 95833

Tel 916-920-0300

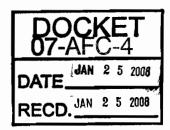
Fax 916-920-8463



January 25, 2008

360346

Christopher Meyer Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512



Subject: Chula Vista Energy Upgrade Project (07-AFC-4)

Data Request Response to CEC Staff Data Requests 2, 3, 4, 5, and 25

Dear Mr. Meyer:

Attached please find one original and 12 copies of MMC Energy, Inc. responses to California Energy Commission Staff Data Requests 2, 3, 4, 5, and 25 for the Application for Certification for the Chula Vista Energy Upgrade Project (07-AFC-04).

If you have any questions about this matter, please contact me at (916) 286-0278 or Sarah Madams at (916) 286-0249.

Sincerely,

CH2M HILL

Douglas M. Davy, Ph.D.

mb h my

AFC Project Manager

Attachment

cc: S. Madams

## BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

Application for Certification for the CHULA VISTA ENERGY UPGRADE PROJECT

Docket No. 07-AFC-4

PROOF OF SERVICE (Revised 01/03/08)

<u>INSTRUCTIONS:</u> All parties shall 1) send an original signed document plus 12 copies <u>OR</u> 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed <u>OR</u> electronic copy of the documents that <u>shall include a proof of service declaration</u> to each of the individuals on the proof of service:

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 06-AFC-07 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us

#### **APPLICANT**

Harry Scarborough
Vice President
MMC Energy Inc.
11002 Ainswick Drive
Bakersfield, CA 93311
hscarborough@mmcenergy.com

#### **APPLICANT'S CONSULTANTS**

Douglas M. Davy, Ph.D. CH2M HILL Project Manager 2485 Natomas Park Drive, Suite 600 Sacramento, CA 95833 ddavy@ch2m.com

#### **APPLICANTS ENGINEER**

Steven Blue
Project Manager
Worley Parsons
2330 E. Bidwell, Suite 150
Folsom, CA 95630
Steven.blue@worleyparsons.com

#### **COUNSEL FOR APPLICANT**

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Downey Brand Law Firm
555 Capitol Mall, 10th Floor
Sacramento, CA 95814
jluckhardt@downeybrand.com

#### **INTERESTED AGENCIES**

Larry Tobias
Ca. Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
LTobias@caiso.com

Electricity Oversight Board 770 L Street, Suite 1250 Sacramento, CA 95814 esaltmarsh@eob.ca.gov

#### **INTERVENORS**

- \* California Unions for Reliable Energy (CURE)
  c/o Marc D. Joseph
  Gloria Smith
  Suma Peesapati
  Adams Broadwell Joseph & Cardozo
  601 Gateway Boulevard, Suite 1000
  South San Francisco, CA 94080
  mdjoseph@adamsbroadwell.com
  gsmith@adamsbroadwell.com
  speesapati@adamsbroadwell.com
- \* City of Chula Vista, California c/o Charles H. Pomeroy Caren J. Dawson McKenna, Long & Aldridge, LLP 444 South Flower Street Los Angeles, CA 90071 cpomeroy@mckennalong.com cdawson@mckennalong.com
- \* Environmental Health Coalition
  Diane Takvorian & Leo Miras
  401 Mile of Cars Way, Suite 310
  National City, CA 91950
  DianeT@environmentalhealth.org
  LeoM@environmentalhealth.org

#### **ENERGY COMMISSION**

Jackalyne Pfannenstiel, Chair Presiding Committee Member jpfannen@energy.state.ca.us

James D. Boyd, Vice Chair Associate Committee Member jboyd@energy.state.ca.us

Raoul Renaud Hearing Officer rrenaud@energy.state.ca.us

Chris Meyer
Project Manager
cmeyer@energy.state.ca.us

Kevin Bell Staff Counsel kbell@energy.state.ca.us Public Adviser's Office pao@energy.state.ca.us

#### **DECLARATION OF SERVICE**

I, Haneefah Walker, declare that on January 25, 2008, I deposited the required copies of the attached Data Requests Response to CEC Staff Data Requests 2-5 and 25, filed in support of the Chula Vista Energy Upgrade Project (07-AFC-4) in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above. I declare under penalty of perjury that the foregoing is true and correct.

#### OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

#### Supplemental Filing

# Response to CEC Staff Data Requests 2-5, and 25

In support of the

## **Application for Certification**

for the

### Chula Vista Energy Upgrade Project

Chula Vista, California (07-AFC-4)

Submitted to the: California Energy Commission



With Technical Assistance by:



January 2008

#### Supplemental Filing

# Response to CEC Staff Data Requests 2-5, and 25

In support of the

# **Application for Certification**

for the

# Chula Vista Energy Upgrade Project

Chula Vista, California (07-AFC-4)

Submitted to the: California Energy Commission

Submitted by:

With Technical Assistance by:



January 2008

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| DR2-2        | Source Test Data                                       |   |
| DR25-1       | SDAPCD Cumulative Inventory                            |   |

#### Introduction

Attached are MMC Energy Inc.'s (MMC) responses to California Energy Commission (CEC) Staff data requests 2 through 5, and 25 regarding the Chula Vista Energy Upgrade Project (07-AFC-4). The CEC Staff served the data requests on November 7, 2007, as part of the discovery process for the CVEUP project.

The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as CEC Staff presented them and are keyed to the Data Request numbers (1 through 47). New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Data Request 15 would be numbered Table DR15-1. The first figure used in response to Data Request 28 would be Figure DR28-1, and so on.

Additional tables, figures, or documents submitted in response to a data request or workshop query (supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of a discipline-specific section and are not sequentially pagenumbered consistently with the remainder of the document, though they may have their own internal page numbering system.

1

Air Quality

## Air Quality (DR2-5 and DR25)

#### FT8 Twinpac Turbine Information

- 2. a. Please provide fuel consumption data for the FT8 Twinpac turbines for the years 2004, 2005 and 2006.
  - b. Please provide emissions data, either from Continuous Emissions Monitors or by source tests for the emissions of NOx, VOC, PM10, PM2.5 and Sox
  - c. Please provide an average annual emissions summary for the FT8 turbines based upon the fuel consumption data of Data Request 2a and the emissions data of Data Request 2b.

**Response**: Hours of operation were obtained for the years 2001 through November 2007. During the years 2004 and 2005, the plant was in receivership and did not operate. The approximate hours of operation were:

```
2001 186 hours
2002 318 hours
2003 376 hours
2004 0 hours
2005 0 hours
2006 128 hours
2007 58 hours (ending November 2007)
```

Using the average of the last five-year of actual operation, not counting the period where the plant was in bankruptcy, the average is approximately 213 hours per year of operation. Please refer to Attachment DR2-1.

The source test data is also provided in Attachment DR2-2. The 2006 source test data was for NOx, CO, VOC, and NH<sub>3</sub>. No testing was completed for either PM10 or SO<sub>2</sub> nor is there data during turbine startup.

For estimating turbine startup emissions, it was assumed that the turbine would be controlled only with water injection for the first 30 minutes at 42 ppm for NOx. CO, VOC, PM10, and SO<sub>2</sub> startup emissions assumed base loaded emissions. Thus, for NOx, the startup emission rate for the first 30 minutes would be 59.09 lbs plus last 30 minutes at 5 ppm or 3.6 lbs for a total NOx emission rate during a start of 62.7 lbs. Based on the average of the last two years of operation (213 hours), the emissions based on the 2006 source test data for NOx, CO, VOC and the permitted limits for SO<sub>2</sub> and PM10, and assuming 36 hours of turbine startup we get the following amounts:

- NO<sub>x</sub> 1.3 tpy
- CO 4.6 tpy
- VOC 0.07 tpy

- PM10 0.5 tpy
- SO<sub>2</sub> 0.2 tpy

#### Schedule for Offsets

3. Please discuss and provide a schedule as to when the applicant will provide a list of potential offsets that would partially or entirely mitigate the project's NOx, PM10, PM2.5, VOC and  $SO_x$  emissions identified on p. DA-12

Response: The proposed mitigation will be calculated using a two-step process. The first step is to take the difference between the existing facility's actual daily emissions and the potential daily emissions from the new facility and to multiply this by the estimated annual days of operation of the existing facility. This takes into account the removal of the existing facility when the new facility is constructed. For this calculation, the existing facility emissions are based on running time (213 annual hours of operation or approximately 6 hours per day times 36 days of operations) with 2006 source test data. The new facility's operations are based on an assumed worst-case level of 10 hours a day for 1000 hours (100 days) of annual operation.

The second step in the process is to calculate the annual emissions of the proposed facility, based on the daily potential to emit of the new facility alone for 64 days of operation. This takes into account the length of time, 64 days out of 100 days, when the new plant would be operating that the existing plant would not.

Table DR3-1 lists, for each criteria pollutant, the emissions of the existing facility, operating an average of 6 hours per day and the proposed facility, operating an average of 10 hours per day, and the difference between their respective potentials to emit. This difference is the basis for calculating the offsets.

TABLE DR3-1
Existing Actual vs. New PTE Comparison (pounds per day, Assuming 6 Hours of Existing, and 10 hours of New Plant)

| Pollutant                           | Current Facility at 6<br>Hours per Day <sup>a</sup> | Proposed Facility at 10<br>Hours per Day <sup>b</sup> | Difference <sup>c</sup> |
|-------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-------------------------|
| NO <sub>x</sub>                     | 74.8                                                | 114.2                                                 | 39.4                    |
| CO                                  | 256.8                                               | 140.2                                                 | -116.6                  |
| VOC                                 | 4.0                                                 | 22.6                                                  | 18.6                    |
| SO <sub>x</sub>                     | 9.5                                                 | 20.0                                                  | 10.5                    |
| PM <sub>10</sub> /PM <sub>2.5</sub> | 27.2                                                | 60.0                                                  | 32.8                    |

<sup>&</sup>lt;sup>a</sup> Based on 6 hours of operation per day which includes one start based on actuals for NOx, CO, VOCs.

To calculate offsets, the difference between the two facilities in pounds per day potential to emit (see "difference" column in Table DR3-1) is multiplied by 36 days. For the remaining 64 days that make up the 100 days per year of estimated new plant operation, the daily emissions from the proposed new facility, as shown in Table DR3-1, are multiplied by 64 days to produce an estimate of total annual emissions for the facility. Using the method

CVEUP\_DRR\_2-5\_25\_012508.DOC 6 AIR QUALITY (DR2-5 AND DR25)

b Based on 10 hours of operation per day which includes one start and potential emissions.

c Approximate emissions increases and decreases in pounds per day.

proposed above, and assuming the amount mitigated on a daily basis is the difference between emissions of the two facilities multiplied by 36 days of operation plus the emissions of the proposed facility multiplied by 64 days, the mitigation quantities would be:

| Total                               | 8.75 tons |
|-------------------------------------|-----------|
| PM <sub>10</sub> /PM <sub>2.5</sub> | 2.51 tons |
| $SO_x$                              | 0.83 tons |
| VOC                                 | 1.05 tons |
| $NO_x$                              | 4.36 tons |

#### **Mitigation Fees**

4. Please discuss the amount of mitigation fees the applicant is willing to pay to the SDAPCD and the basis for calculating those fees.

**Response**: To mitigate the emissions of non-attainment pollutants and their precursors, MMC Energy will set aside an air quality mitigation fund to add to the SDAPCD Carl Moyer Program that provides incentives for projects that will result in actual emission reductions from combustion sources.

MMC Energy proposes to fund the Carl Moyer program at a rate of \$20,000 per ton of pollutant, plus an administration fee. The total funds would then be based on 8.75 tons at \$20,000 per ton plus a 20 percent administration fee, totaling \$210,010.

#### SDAPCD use of Mitigation Fees

5. Please discuss to which SDAPCD programs the fees would be applied

**Response:** Based on the District's previous practice with the Palomar Project, the fees would be applied to the SDAPCD Carl Moyer Program, but would be directed for the first two years towards projects that would directly benefit areas within the City of Chula Vista. After two years, if there are remaining funds available, the fees could be distributed throughout San Diego County.

#### **Cumulative Project List**

25. Please provide a copy of the cumulative project list to be provided by SDAPCD as noted on Page DA-17 of the Data Adequacy Supplement.

**Response:** The SDAPCD cumulative inventory is provided Attachment DR25-1. The inventory contains no information with regards to emissions or stack parameters. The SDAPCD requires the Applicant to review District files to obtain the necessary data. Some of these sources appear to be VOC-based emissions that are not included in cumulative analyses. The Applicant will work with the CEC Staff to establish which sources should be included in the cumulative analysis. Once this list is finalized, the appropriate stack parameters for the background cumulative sources will be obtained from District files.

# **Attachment DR2-1**

Total Run Hours for Chula Vista Power Plant, 2002-2007

#### **ATTACHMENT DR2-1**

#### **Gregory Darvin**

From:

Harry Scarborough [hscarborough@mmcenergy.com]

Sent:

Wednesday, December 05, 2007 4:13 PM

To:

Gregory Darvin

Subject: FW: Chula Vista

Harry Scarborough Sr. VP Operations and Business Development MMC Energy North America, LLC 11002 Ainswick Dr Bakersfield, CA

661 664 7152 661 364 7946 (cell) 661 664 7102 (fax)

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From: Mark Wellard [mailto:mwellard@proenergyservices.com]

Sent: Wednesday, December 05, 2007 3:26 PM

To: Harry Scarborough Subject: RE: Chula Vista

Harry.

The Total run Hours for Chula Vista in 2006 were 127.59 hrs The Total Run hours through November 2007 are 57.72 Hrs I verified these hours and they are from the Logbook not the Cems reports

Mark Wellard ProEnergy Services 2031 Adams Rd Sedalia, Missouri 65301 660-829-5100 office 660-829-1160 fax 660-281-1356 Cell

http://www.printerleverstreadomes.com

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Thank you.

From: Harry Scarborough [mailto:hscarborough@mmcenergy.com]

Sent: Fri 11/30/2007 5:52 PM

To: Mark Wellard

Subject: Fw: Chula Vista

#### **Gregory Darvin**

From:

Donelle Griffin [dgriffi1@san.rr.com]

Sent:

Wednesday, December 12, 2007 12:28 PM

To:

**Gregory Darvin** 

Cc:

'Harry Scarborough'; Everett; mwellard@proenergyservices.com

Subject:

Re: Chula Vista Run Data

#### Greg,

Sorry to take so long to get back to you...I thought I had some of this electronically but had to go to site for hard copies and go through the log books (hard copies) from 2001 - 2003.

#### So,

I am dropping in the mail for you the RATA/Source Testing Data from Chula Vista from 2003 & 2006. The turbines were "cold steel" in 2004 & 2005.

From the log books the unit runtime in 2001 - 186 hours; 2002 - 132 hrs 44 min.; 2003 - 562 hrs. to the best of my interpretation from the chicken scratch.

#### The actual entries were

total hours: 186 (12/13/01)

total hours: 318 hrs. 44 min. (2/20/03 - no runs prior to that in 2003 so

all 2002 hours)

total hours: 880 hrs. 24 min. (10/28/03)

That might actually translate out to 186 hours in 2001; 318 hours in 2002 and 376 hours in 2003 - depending on how they were thinking but I know the total from 2001 - 2003 was 880 hours 24 min. I understand you got the rest of the operational hours from Mark Wellard (2006 & 2007 to date).

I have no way of obtaining the gas used except with old CEMS data which I believe is still obtainable thru EMC (who did/does the EDR to the EPA). If anyone would have additional information you need it would be him, although I don't know what it would cost to obtain the data. Let me know if we need to pursue it further.

Best Regards,

Donelle Griffin

Environmental Consultant

Home Office 858-278-9170 Cell 858-354-4995

FAX 858-408-3496

dgriffil@san.rr.com

---- Original Message -----

From: "Gregory Darvin" <darvin@atmosphericdynamics.com>

To: <dgriffil@san.rr.com>

Cc: "'Harry Scarborough'" <hscarborough@mmcenergy.com>

Sent: Friday, November 30, 2007 4:55 PM

Subject: Chula Vista Run Data

- > Donelle, thanks for your help with all of this.
- > I am trying to establish a baseline for actual emissions at Chula Vista
- > over
- > the last five years. I understand the plant ran for a total 880 to date.
- > What I need is the following:
- > 1. Hours of operation by year.
- > 2. Hours of operation by day and month
- > 3. The recent source test data collected in 2006 for all pollutants
- > 4. Fuel use data by year and day/month

```
> 5. CEMS data (which should have the fuel use data in it along with
> parametric monitoring data for VOC, PM10, and SO2)
> I know this is a large request. You can provide the data as you get it
rather than giving it me all at once. My email and postal address is
 below.
> Again thank you for your help.
> Regards.
> Gregory S. Darvin
> Atmospheric Dynamics, Inc.
> 2925 Puesta del Sol
> Santa Barbara, CA 93105
> 805.569.6555
> 805.569.6558
> darvin@atmosphericdynamics.com
>
>
```

# **Attachment DR2-2**

Source Test Data



#### **ATTACHMENT DR2-2**



#### 1.0 INTRODUCTION AND SUMMARY

Delta Air Quality Services (Delta) was contracted by MMC Energy Inc. to conduct annual permit renewal emissions performance testing on the stack and relative accuracy tests audits (RATAs) of the continuous emissions monitoring system (CEMS) serving a gas turbine power generating unit at MMC Energy Inc.'s Chula Vista Power Plant facility. Delta conducted the testing to comply with conditions contained in San Diego County Air Pollution Control District (SDAPCD) Permit to Operate. Dave Wonderly and Randy Monzon of Delta conducted the testing. Bob Bingham coordinated the testing for MMC Energy Inc. Larry Owusu from the San Diego APCD was present and witnessed all of the testing.

Permit renewal emissions tests were performed at the unit's stack during natural gas firing. Triplicate tests for the following emissions were performed:

- Oxides of Nitrogen (NO<sub>x</sub>) concentration ppmv @ 15% O<sub>2</sub>, dry;
- Carbon Monoxide (CO) concentration ppmv @ 15% O<sub>2</sub>, dry;
- Ammonia concentration ppmv @ 15% O<sub>2</sub>, dry;
- Volitile Organic Compounds (VOC) @ 15% O<sub>2</sub>, dry;

The results of the renewal tests and RATAs are summarized in Tables 1-1 and 1-2 below. More detailed results can be found in Section 4.

#### TABLE 1-1 RENEWAL TEST RESULTS SUMMARY

| Parameter                                                  | Result | Limit  |
|------------------------------------------------------------|--------|--------|
| Oxides of Nitrogen (NO <sub>x</sub> )                      | 4.0    | 5 ppm  |
| concentration ppmv @ 15% O₂, dry                           |        |        |
| Carbon Monoxide (CO)                                       | 43     | 70 ppm |
| concentration ppmv @ 15% O <sub>2</sub> , dry              |        |        |
| Ammonia concentration ppmv @                               | 3.9    | 10 ppm |
| 15% O <sub>2</sub> , dry                                   | ŗ.·    |        |
| Volitile Organic Compounds (VOC)                           | 0.7    | 2 nnm  |
| Volitile Organic Compounds (VOC)<br>@ 15% O <sub>2</sub> , | 0.7    | 2 ppm  |
| <b>3</b> .5.3 <b>5</b> 2,                                  |        |        |

TABLE 1-2 RATA RESULTS SUMMARY

| Parameter                  | Reference<br>Method | CEM   | Mean Difference | Relative Accuraccy |
|----------------------------|---------------------|-------|-----------------|--------------------|
| NO <sub>x</sub> , ppmC     | 3.87                | 3.93  | -0.06           | 6.9                |
| NO <sub>x</sub> , lb/hr    | 6.93                | 7.21  | -0.28           | 9.7                |
| NO <sub>x</sub> , lb/MMBtu | 0.014               | 0.015 | 0.000           | 0.000              |
| CO, ppmC                   | 41.53               | 40.94 | 0.59            | 3.6                |
| CO, lb/hr                  | 45.33               | 45.72 | -0.39           | 2.9                |

Note: NO<sub>x</sub>, lb/MMBtu result is expressed in Absolute difference. Rab Limit = 10% or absolute difference of 0.02 lb/MMBtu (0.015 lb/MMBtu to make incentive)



#### 1.1 TEST PROGRAM ORGANIZATION

Delta Air Quality Services Representative Bob Finken 1845 N. Case Street

Orange, California 92865 Phone: (714) 279-6777 Fax: (714) 279-6781

San Diego County Air Pollution Control
District Contact
Suzanne Blackburn
9150 Chesapeake Drive
San Diego, California 92123-1095

Phone: (858) 650-4630 Fax: (858) 650-4658 MMC Energy Inc.Representative
Bob Bingham
Calpine Corp. Technical Consultant for
MMC Energy Inc.
1968 Don Lee Place
Chula Vista, CA 92092
Phone: (760) 291-1697

Fax:

#### 2.1 GAS TURBINE

The MMC Energy Inc. Chula Vista Project is a 36 MW "twin-pack" simple cycle gas turbine generator set consisting of two gas turbines directly coupled to one electric generator. The unit can only be operated while both gas turbines are in service. The turbines are equipped with Pratt & Whitney, model FT4/GG4 dry low-NO<sub>x</sub> burners rated at 522 MMBtu/hr heat input. The gas turbines are equipped with selective catalytic reduction (SCR) utilizing aqueous ammonia as a reducing agent for NO<sub>x</sub> control and an oxidation catalyst to control carbon monoxide emissions.

The plant is equipped with a Continuous Emissions Monitoring System (CEMS) that provides measurements of  $O_2$ , CO, and  $NO_x$  concentrations. It is an extractive system with a heated line extending from the probe to the sample conditioning unit. The CEMS is a packaged system provided by Environmental Monitoring Contractors. The system major components are presented in table 2-1.

TABLE 2-1
CONTINUOUS EMISSION MONITORING SYSTEM
MMC ENERGY INC.CHULA VISTA

| Component                            | Manufacturer/ Model         | Range     |
|--------------------------------------|-----------------------------|-----------|
| Sample Conditioner                   | Universal Analyzer 3050 SSP | NA        |
| Filter Box                           | Universal Analyzer 27OS     | NA        |
| NO <sub>x</sub> monitor (high range) | TECO 42 CH                  | 0-100 ppm |
| NO <sub>x</sub> monitor (low range)  | TECO 42 CH                  | 0-10 ppm  |
| CO monitor                           | TECO 48C                    | 0-200 ppm |
| O <sub>2</sub> monitor               | Servomex 1440C              | 0-25 %    |
| DAHS                                 | ESC 8816, v. 5.28           | NA        |
| DAHS Software                        | E-DAS v. 3.5.0              | NA        |

#### 3.0 TEST DESCRIPTION

#### 3.1 TEST CONDITIONS

The emissions testing was conducted while the unit was firing natural gas. During each test selected process parameters were recorded by the facility CEMS data acquisition system (DAS). A summary of the process operations during the tests is presented below in Table 3-1.

TABLE 3-1
RENEWAL TEST PROCESS CONDITIONS

|               |          |                   |          |          | Fuel Flow, |
|---------------|----------|-------------------|----------|----------|------------|
| Run/Parameter | Date     | Start Time        | End Time | Load, MW | Cdscfh     |
| 1             | 6/7/2006 | 9:02              | 10:14    | 32.3     | 4820       |
| 2             | 6/7/2006 | 10:37             | 11:57    | 32.2     | 4803       |
| 3             | 6/7/2006 | 12:30             | 13:41    | 32.3     | 4815       |
| 4             | 6/7/2006 | 14:02             | 14:54    | 32.0     | 4781       |
| 5             | 6/7/2006 | 15:0 <del>6</del> | 15:57    | 31.9     | 4769       |
| 6             | 6/7/2006 | 16:11             | 17:02    | 31.8     | 4761       |
| 7             | 6/7/2006 | 17:14             | 17:58    | 31.9     | 4762       |
| 8             | 6/7/2006 | 18:10             | 18:54    | 32.1     | 4791       |
| 9             | 6/7/2006 | 19:06             | 19:50    | 32.1     | 4803       |
|               |          |                   |          |          |            |

#### 3.2 SAMPLE LOCATIONS

All tests were conducted at the sample locations on the exhaust stack of the combustion turbine. The stack consists of a rectangular duct measuring 7'2" feet by 38 feet with nine sample ports running along its face. The sampling was conducted using an 18-point (9 x 2) grid sampled for 2 minutes per point for a total of 36 minutes of sampling time as requested by the APCD. The points selected according to EPA Method 1 using 34 of the stack depth as the deep quarter has been proven to have no stack flow.

#### 3.3 TEST PROCEDURES

The test procedures used are presented in Table 3-2. Triplicate tests were conducted for all species for the renewal tests with an additional seven runs for  $NO_x$  and CO only to complete the RATA. Detailed descriptions of standard test procedures are included in Appendix A. Additional details and issues specific to this test program are presented in Table 3-2 and the text that follows.

#### 3.3.1 Continuous Gaseous Measurements

 $NO_x$ ,  $O_2$ , CO, and  $CO_2$  were measured according to SDCAPCD reference methods including the "high  $NO_2$ " procedures using Delta's continuous emissions monitoring system (CEMS). The sampling system employed a heated line and moisture removal trap to conserve any  $NO_2$  that might be present in the flue gas. The CEMS system and test methods are described in detail in Appendix A.

The reference method measurements were performed using an 18-point (9 x 2) grid sampled for 2 minutes per point for a total of 36 minutes of sampling time as requested by the APCD. The data from the first run was used to investigate the  $NO_2$  percentage of the total  $NO_x$ . This check indicated that the source was a "High  $NO_2$ " source as defined by SDAPCD.

TABLE 3-2
TEST PROCEDURES FOR COMPLIANCE TEST PROGRAM

| Parameter       | No of Runs | Measurement Principle                               | Reference<br>Method       | Comments          |
|-----------------|------------|-----------------------------------------------------|---------------------------|-------------------|
| NO <sub>x</sub> | 3          | Chemiluminescence                                   | SDCAPCD<br>Method 100     | 18-point traverse |
| со              | 3          | Non-Dispersive Infrared                             | SDCAPCD<br>Method 100     | 18-point traverse |
| O <sub>2</sub>  | 3          | Electrochemical Cell                                | SDCAPCD<br>Method 100     | 18-point traverse |
| NH₃             | 3          | Colorimetric                                        | South Coast<br>AQMD 207.1 | 18-point traverse |
| VOC             | 3          | Gas Chromatography Flame Ionization Photoionization | SDCAPCD<br>Method 18      | 18-point traverse |

#### 3.3.2. Ammonia

The ammonia concentration in the stack gases were measured using SCAQMD 207.1. The samples were collected using a 18 point traverse. The sampling system is described in Appendix A.

#### 3.3.3 Volatile Organic Compounds

Integrated VOC samples were collected into new Tedlar bags using a "lung" type sampler. The bags were purged before collection of the sample. The samples were collected using a 27-point traverse. Once collected the samples were analyzed for  $C_1$  to  $C_{6+}$  by GC/FID within 72 hours of collection using SDCAPCD Method 18 analytical procedures. Results were reported as total non-methane, non-ethane organic compounds as carbon from the  $C_3-C_6$  data.

#### 3.4 TEST SCHEDULE

The test program was conducted on June 7, 2006.



#### 4.0 RESULTS

The Results of the renewal tests are presented in Table 4-1 below. Raw field and laboratory data along with calculation summaries can be found in the appendices.

TABLE 4-1
MMC ENERGY NORTH AMERICA
CHULA VISTA UNIT 1
TEST RESULTS

| Date                                  |               | 6/7/2006 | 6/7/2006 | 6/7/2006 |         |       |
|---------------------------------------|---------------|----------|----------|----------|---------|-------|
| Start Time                            |               | 9:02     | 10:37    | 12:30    |         |       |
| End Time                              |               | 10:14    | 11:57    | 13:41    |         |       |
| Parameter                             | Units         | Run 1    | Run 2    | Run 3    | Average | Limit |
| Oxygen (O <sub>2</sub> )              | %             | 16.69    | 16.82    | 16.80    | 16.77   |       |
| Oxides of Nitrogen (NO <sub>x</sub> ) | ppmv          | 3.0      | 2.7      | 2.7      | 2.8     |       |
| Oxides of Nitrogen (NO <sub>x</sub> ) | ppmv @ 15% O₂ | 4.2      | 4.0      | 3.9      | 4.0     | 5     |
| Oxides of Nitrogen (NO <sub>x</sub> ) | lb/hr         | 7.5      | 7.1      | 6.9      | 7.2     |       |
| Carbon Monoxide (CO)                  | ppm           | 28.2     | 27.5     | 26.2     | 27.3    |       |
| Carbon Monoxide (CO)                  | ppmv @ 15% O₂ | 39.4     | 39.8     | 37.7     | 39.0    | 70    |
| Carbon Monoxide (CO)                  | lb/hr         | 43.5     | 43.7     | 41.3     | 42.8    |       |
| VOC                                   | ppm           | 0.48     | 0.54     | 0.44     | 0.49    |       |
| VOC                                   | ppmv @ 15% O₂ | 0.70     | 0.79     | 0.63     | 0.71    | 2     |
| Ammonia (NH <sub>3</sub> )            | ppm           | 2.4      | 2.7      | 3.0      | 2.7     |       |
| Ammonia (NH <sub>3</sub> )            | ppmv @ 15% O₂ | 3.5      | 3.9      | 4.3      | 3.9     | 10    |

The results of the RATA tests are contained in tables 4-2 through 4-6 below.

Delta $\Delta$ 

# TABLE 4-2 MMC ENERGY NORTH AMERICA CHULA VISTA UNIT 1 RATA RESULTS NO<sub>x</sub>, PPM @ 15% O<sub>2</sub>

|         |          |       | Time     | RM   | CEMS | Difference | Valid Run     |
|---------|----------|-------|----------|------|------|------------|---------------|
| Test    | Date     | Start | End Time | ppmC | ppmC | ppmC       | (1=yes, 0=no) |
| 1       | 6/7/2006 | 9:02  | 10:14    | 4.2  | 3.9  | 0.26       | 1             |
| 2       | 6/7/2006 | 10:37 | 11:57    | 4.0  | 4.1  | -0.10      | 1             |
| 3       | 6/7/2006 | 12:30 | 13:41    | 3.9  | 4.0  | -0.10      | 1             |
| 4       | 6/7/2006 | 14:02 | 14:54    | 3.5  | 3.4  | 0.10       | 1             |
| 5       | 6/7/2006 | 15:06 | 15:57    | 3.7  | 3.6  | 0.13       | 1             |
| 6       | 6/7/2006 | 16:11 | 17:02    | 3.5  | 4.0  | -0.49      | 1 ·           |
| 7       | 6/7/2006 | 17:14 | 17:58    | 3.8  | 4.1  | -0.26      | 1             |
| 8       | 6/7/2006 | 18:10 | 18:54    | 4.0  | 4.4  | -0.35      | 1             |
| 9       | 6/7/2006 | 19:06 | 19:50    | 4.2  | 4.0  | 0.23       | 1             |
| Average |          |       |          | 3.87 | 3.93 | -0.06      |               |

Ref. Method Average: 3.87 ppmC Average Difference: -0.06 ppmC

Number of Tests: 9

Standard Deviation: 0.26 ppmC

t Value: 2.306

Confidence Coefficient: 0.20 ppmC Relative Accuracy: 6.93 % Bias Adjustment Factor: 1.000

Test Condition: 32.3 MW

# TABLE 4-3 MMC ENERGY NORTH AMERICA CHULA VISTA UNIT 1 RATA RESULTS NO<sub>x</sub>, LB/HR

|         |          |       | Time     | RM    | CEMS  | Difference | Valid Run     |
|---------|----------|-------|----------|-------|-------|------------|---------------|
| Test    | Date     | Start | End Time | lb/hr | lb/hr | lb/hr_     | (1=yes, 0=no) |
| 1       | 6/7/2006 | 9:02  | 10:14    | 7.53  | 7.28  | 0.25       | 1             |
| 2       | 6/7/2006 | 10:37 | 11:57    | 7.11  | 7.55  | -0.44      | 1             |
| 3       | 6/7/2006 | 12:30 | 13:41    | 6.94  | 7.39  | -0.45      | 1             |
| 4       | 6/7/2006 | 14:02 | 14:54    | 6.34  | 6.22  | 0.12       | 1             |
| 5       | 6/7/2006 | 15:06 | 15:57    | 6.64  | 6.51  | 0.13       | 1             |
| 6       | 6/7/2006 | 16:11 | 17:02    | 6.24  | 7.29  | -1.05      | 1             |
| 7       | 6/7/2006 | 17:14 | 17:58    | 6.80  | 7.41  | -0.61      | 1             |
| 8       | 6/7/2006 | 18:10 | 18:54    | 7.13  | 7.98  | -0.85      | 1             |
| 9       | 6/7/2006 | 19:06 | 19:50    | 7.67  | 7.30  | 0.37       | 1             |
| Average |          |       |          | 6.93  | 7.21  | -0.28      |               |

Ref. Method Average: 6.93 lb/hr Average Difference: -0.28 lb/hr

Number of Tests: 9

Standard Deviation: 0.51 lb/hr

t Value: 2.306

Confidence Coefficient: 0.39 lb/hr Relative Accuracy: 9.7 %

Bias Adjustment Factor: 1.000

Test Condition: 32.3 MW

# TABLE 4-4 MMC ENERGY NORTH AMERICA CHULA VISTA UNIT 1 RATA RESULTS NO<sub>x</sub>, LB/MMBTU

|         |          |       | Time        | RM             | CEMS     | Difference | Valid Run     |
|---------|----------|-------|-------------|----------------|----------|------------|---------------|
| Test    | Date     | Start | End Time    | lb/MMBtu       | lb/MMBtu | lb/MMBtu   | (1=yes, 0=no) |
| 1       | 6/7/2006 | 9:02  | 10:14       | 0.015          | 0.015    | 0.000      | 1             |
| 2       | 6/7/2006 | 10:37 | 11:57       | 0.015          | 0.015    | 0.000      | 1             |
| 3       | 6/7/2006 | 12:30 | 13:41       | 0.014          | 0.015    | -0.001     | 1             |
| 4       | 6/7/2006 | 14:02 | 14:54       | 0.013          | 0.013    | 0.000      | 1             |
| 5       | 6/7/2006 | 15:06 | 15:57       | 0.014          | 0.013    | 0.001      | 1             |
| 6       | 6/7/2006 | 16:11 | 17:02       | 0.013          | 0.015    | -0.002     | 1             |
| 7       | 6/7/2006 | 17:14 | 17:58       | 0.014          | 0.015    | -0.001     | 1             |
| 8       | 6/7/2006 | 18:10 | 18:54       | 0.015          | 0.016    | -0.001     | 1             |
| 9       | 6/7/2006 | 19:06 | 19:50       | 0.016          | 0.015    | 0.001      | 1             |
| Average |          |       |             | 0.014          | 0.015    | 0.000      |               |
|         |          |       | Ref. Met    | hod Average:   | 0.014    | lb/MMBtu   |               |
|         |          |       | Averag      | e Difference:  | 0.000    | lb/MMBtu   |               |
|         |          |       | Num         | ber of Tests:  | 9        |            |               |
|         |          |       | Standa      | ard Deviation: | 0.001    | lb/MMBtu   |               |
|         |          |       |             | t Value:       | 2.306    |            |               |
|         |          |       | Confidenc   | e Coefficient: | 0.001    | lb/MMBtu   |               |
|         |          |       | Absolu      | te difference: | 0.000    | lb/MMBtu   |               |
|         |          |       | Bias Adjust | tment Factor:  | 1.000    |            |               |
|         |          |       | Τe          | est Condition: | 32.3     | MW         | •             |

Rab Limit = 10% or absolute difference of 0.02 lb/MMBtu (0.015 lb/MMBtu to make inncentive)



#### TABLE 4-5 MMC ENERGY NORTH AMERICA **CHULA VISTA UNIT 1 RATA RESULTS** CO, PPM @ 15% O<sub>2</sub>

|         |          |       | Time     | RM    | CEMS  | Difference | Valid Run     |
|---------|----------|-------|----------|-------|-------|------------|---------------|
| Test    | Date     | Start | End Time | ppmC  | ppmC  | ppmC       | (1=yes, 0=no) |
| 1       | 6/7/2006 | 9:02  | 10:14    | 39.4  | 40.4  | -0.98      | 1             |
| 2       | 6/7/2006 | 10:37 | 11:57    | 39.8  | 39.5  | 0.31       | 1             |
| 3       | 6/7/2006 | 12:30 | 13:41    | 37.7  | 37.7  | 0.01       | 1             |
| 4       | 6/7/2006 | 14:02 | 14:54    | 41.4  | 40.8  | 0.65       | 1             |
| 5       | 6/7/2006 | 15:06 | 15:57    | 41.8  | 40.7  | 1.09       | 1             |
| 6       | 6/7/2006 | 16:11 | 17:02    | 42.3  | 41.2  | 1.11       | 1             |
| 7       | 6/7/2006 | 17:14 | 17:58    | 45.2  | 42.2  | 3.02       | 1             |
| 8       | 6/7/2006 | 18:10 | 18:54    | 42.6  | 41.9  | 0.74       | 1             |
| 9       | 6/7/2006 | 19:06 | 19:50    | 43.6  | 44.3  | -0.65      | 1             |
| Average |          |       |          | 41.53 | 40.94 | 0.59       |               |

Ref. Method Average: 41.53 ppmc Average Difference: 0.59 ppmc

Number of Tests: 9

Standard Deviation: 1.17 t Value: 2.306 ppmc

Confidence Coefficient: 0.90 ppmc Relative Accuracy: 3.58

Bias Adjustment Factor: 1.000 Test Condition: 32.3 MW

# TABLE 4-6 MMC ENERGY NORTH AMERICA CHULA VISTA UNIT 1 RATA RESULTS CO, LB/HR

|         |          |               | Time     | RM    | CEMS  | Difference | Valid Run     |
|---------|----------|---------------|----------|-------|-------|------------|---------------|
| Test    | Date     | Start         | End Time | lb/hr | lb/hr | lb/hr      | (1=yes, 0=no) |
| 1       | 6/7/2006 | 9:02          | 10:14    | 43.45 | 45.40 | -1.95      | 1             |
| 2       | 6/7/2006 | 10:37         | 11:57    | 43.68 | 44.20 | -0.52      | 1             |
| 3       | 6/7/2006 | 12:30         | 13:41    | 41.30 | 42.30 | -1.00      | 1             |
| 4       | 6/7/2006 | 14:02         | 14:54    | 45.03 | 45.40 | -0.37      | 1             |
| 5       | 6/7/2006 | 15:0 <b>6</b> | 15:57    | 45.34 | 45.30 | 0.04       | 1             |
| 6       | 6/7/2006 | 16:11         | 17:02    | 45.86 | 45.70 | 0.16       | 1             |
| 7       | 6/7/2006 | 17:14         | 17:58    | 49.00 | 46.80 | 2.20       | 1             |
| 8       | 6/7/2006 | 18:10         | 18:54    | 46.44 | 46.80 | -0.36      | 1             |
| 9       | 6/7/2006 | 19:06         | 19:50    | 47.91 | 49.60 | -1.69      | 1             |
| Average |          |               |          | 45.33 | 45.72 | -0.39      | -             |

Ref. Method Average: 45.33 lb/hr Average Difference: -0.39 lb/hr

Number of Tests: 9

Standard Deviation: 1.21 lb/hr

t Value: 2.306

Confidence Coefficient: 0.93 lb/hr Relative Accuracy: 2.9 % Bias Adjustment Factor: 1.000

Test Condition: 32.3 MW

## **Attachment DR25-1**

SDAPCD Cumulative Inventory

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| 253 A   | 253 A NATL STEEL & SHIPBUILDING A GENERAL DYNAMICS CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      | 28TH ST & HARBOR DR         | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ð        | ! |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|
| 2643'A  | USN SUBMARINE BASE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      | SAN ONOFRE ARD 30 PIER 5002 | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Š        |   |
| 2643 A  | USN SUBMARINE BASE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      | SAN ONOFRE ARD 30 PIER 5002 | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8        |   |
| 4845 A  | USN NAV STA 1 SCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      | NAVAL STATION               | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | გ        |   |
| 4965 A  | FIRST FLIGHT CORP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6810 | CURRAN ST                   | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>ŏ</b> |   |
| 5913.A  | PROPULSION CONTROLS ENGINEERING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1304 | SAMPSON ST                  | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ₹        |   |
| 8561.A  | SHIPYARD SUPPLIES COASTAL COATINGS INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1809 | MAIN ST                     | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8        | : |
| 8974 A  | Q E D SYSTEMS INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1330 | 30TH ST #D                  | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8        |   |
| 9272 A  | IMPERIAL BEACH CITY OF PWD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 965  | IMPERIAL BEACH BL           | IMPERIAL BEACH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8        |   |
| 9949 A  | PACIFIC YACHT REFITTERS INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 266  | GST                         | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ą        |   |
| 10200 A | IRONWOOD FURNITURE MFG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3192 | COMMERCIAL ST               | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ర        |   |
| 10471 A | DEFENSE COMMISSARY AGENCY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | NAVAL BASE SAN DIEGO        | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | გ        |   |
| 10590 A | OTAY WATER DISTRICT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      | MAXWELL (CROSS ST MAIN)     | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | გ        |   |
| 10654 A | BRIGHTON PLACE SPRING VALLEY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6006 | CAMPO RD                    | SPRING VALLEY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Ą        |   |
| 10670 A | CLANCY CONTRACTING SERVICES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 825  | HOLLISTER ST #M             | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Ą        |   |
| 10674 A | CAFE MOTO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2619 | NATIONAL AV                 | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Š        |   |
| 10722 A | OTAY LAKES SURGERY CENTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 928  | LANE AV                     | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Š        | : |
| 10736 A | MACY'S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2015 | BIRCH RD                    | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 8        |   |
| 10738 A | GREENBRIAR LAWN & TREE CARE CO INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3616 | BANCROFT DR                 | SPRING VALLEY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8        |   |
| 10763 A | EUCLID ENDOSCOPY CENTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 286  | EUCLID AV                   | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 8        |   |
| 10775 A | PRECISION AUTOBODY COLLISION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 686  | PALM AV                     | IMPERIAL BEACH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | క        | - |
| 10817 A | NAVIGATIONAL SERVICES INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 155  | 35TH ST W #B                | NATIONAL CITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 8        |   |
| 10825 A | ELITE AUTO BODY AND PAINT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3626 | MAIN ST                     | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | გ        |   |
| 10830 A | MERVYNS LLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3007 | HIGHLAND AV                 | NATIONAL CITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | გ        | : |
| 10835 A | CUSTOMS AND BORDER PROTECTION (CBP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      | ARNIE'S POINT               | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | გ        | : |
| 10848 A | CHULA VISTA CITY OF FIRE DEPT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1180 | WOODS DR                    | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Š        |   |
| 10884 A | ALBERTSONS #6759                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2310 | PROCTOR VALLEY              | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ర        | ; |
| 10930 A | HARVEST MEAT CO INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1022 | BAY MARINA DR               | NATIONAL CITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | క        |   |
| 10964 A | DEPT OF THE NAVY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      | IB OUTLYING LANDING FIELD   | IMPERIAL BEACH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ્ઇ.      |   |
| 10970 A | AMVETS THRIFT STORE #19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 666  | CARDIFF ST                  | SAN DIEGO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Š        |   |
| 11006 A | OTAY RANCH TOWN CENTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2015 | BIRCH RD                    | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | క        | : |
| 11006 A | OTAY RANCH TOWN CENTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2015 | BIRCH RD                    | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | გ        |   |
| 11161 A | CALTRANS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1881 | BIRCH RD                    | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 8        |   |
| 11162 A | CALTRANS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1978 | BIRCH RD                    | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ą        |   |
| 11169 A | CALTRANS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2186 | OTAY LAKES RD               | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ర        |   |
| 11170 A | CALTRANS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2115 | OTAY LAKES RD               | CHULA VISTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ą        |   |
|         | The second secon |      |                             | The Control of the Co |          |   |

# NOTES:

1/9/2008

The list above is of newly permitted equipment or applications located in the following zip codes: 91902, 91910, 91913, 91914, 91915, 91932, 91950, 91977, 91978, 92113, 92114, 92118, 92136, 92139, 92154, 92155, and 92173. The actual facility may not fall within the 8 mile radius, and represents only new stationary source emissions requiring a SDAPCD Permit applications for equipment modifications that may result in an increase or decrease in emissions are also not included. Actual emissions inventories do no exist for the above equipment. permit or registration. State registrated engines and other state registered sources are not included.

# New Permits or Applications in Process⁴

| SOCKAZIO ENGINE, COMMINS, SIN 18D, MODEL GSAIS-GS INAS, DIESEL, 600 NT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 985354 CATERPILLAR DIESEL ENGINE MODEL C27 HP RATING 1,141<br>985355 CATERPILLAR DIESEL ENGINE MODEL C27 HP RATING 1068                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 985109 JOHN DEERE DIESEL ENGINE MODEL 4045TF270 HP RATING 99<br>984293 SELF SERVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 980736 MARINE COATING OPERATION BRUSH ROLLER NON REFILLABLE HAND HELD AEROSOL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 983232, TWO GRACO AIRLESS PUMPS EACH W/ TWO NOZZLES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 984092 MARINE COATING APPLICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 984933 KOHLER JOHN DEERE DIESEL ENGINE MODEL 250REDZJD 250 KW<br>981661 MARINE COATING OPERATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 982624 WOOD PARTS/PRODUCTS APPLICATION STATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 984905 IC ENGINE FORD MODEL WSG1068, S/N 06ZS51562                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 983758 IC ENGINE CATERPILLAR MODEL G3516TA/130; SN NOT AVAIL; 1048HP, 740KW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 983918 IC ENGINE-JOHN DEERE MDL# 6068HF275L DIESEL 220 HP S/N PE6068H360361                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 985469 ABRASIVE BLASTING POT/MACHINE MODEL 1-9 DEZ S/N 27040070 HP 9.39                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 983944 COFFEE ROASTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 984099 IC ENGINE, CUMMINS, S/N TBD, MODEL OSL9-G2, DIESEL, 249 HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 984121 IC ENGINE, JOHN DEERE, S/N TBD, MODEL 4045TF270, DIESEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 984122 GASOLINE DISPENSING FACILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 984191 JOHN DEERE DIESEL STANDBY ENGINE MODEL 3029TF270 HP RATING 64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 984228 SPRAY BOOTH WITH HVLP EQUIP EXHAUSTED THROUGH PAINT POCKET FILTER MEDIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 984376 MARINE COATING OPERATION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 984407 AUTOMOTIVE APPLICATION STATION SATA MODEL JET 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 984420 S/N UNIT ON ORDER, 150 HP WILL UTILIZE BACKUP PROPANE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 984435 IC ENGINE GENERAL MODEL 0046267; S/N 4356149, 80HP, NATURAL GAS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 984470 IC ENGINE JOHN DEERE MODEL 3029TF270, S/N TBA. 64HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 984590 IC ENGINE KOHLER MODEL 45RZG, S/N TBD, NATURAL GAS 60HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 984686 IC ENGINE, GENERAL MOTORS, S/N 0774556, MODEL 60RZG, NATURAL GAS, 105 HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 984755 IC ENGINE GM MODEL VORTECS.7L, S/N UNAVAILABLE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 984778 GM NATURAL GAS ENGINE MODEL 4.3L V6 VORTEC S/N 102LXT10730444 HP RATING 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 984817 IC ENGINE, CUMMINS, S/N TBD, MODEL 6BTAS.9G4, DIESEL, 170 HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 984818 IC ENGINE, CUMMINS, S/N TBD, MODEL QSL9-G2, DIESEL,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 985188 IC ENGINE GENERAC/DEERE MODEL 4045HF285, DIESEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 985189 IC ENGINE GENERAC/DEERE MODEL 4045HF285, DIESEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 985197 IC ENGINE GENERAC/DEERE MODEL 4045HF285, DIESEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 985196 IC ENGINE GENERAC/DEERE MODEL 4045HF285, DIESEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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